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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,382	08/06/2003	Donald Sheley Tracey	1999B062A	1278

23455 7590 03/07/2007  
EXXONMOBIL CHEMICAL COMPANY  
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EXAMINER
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KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1733

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/635,382

Applicant(s)

TRACEY ET AL.

Examiner

Geoffrey L. Knable

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-18,20,21 and 23-40 is/are pending in the application.
- 4a) Of the above claim(s) 17,18,33,34 and 38-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-16,20,21,23-32 and 35-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

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1. Applicant's election of Species I, claims 1-3, 5-6, 8-18, 20-21 and 23-40 in the reply filed on 12-12-2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

However, insofar as the non-elected species II was directed to the second rubber component being a butyl or isobutylene type polymer, it is considered that claims 17, 18, 33 and 34, although listed by applicant as readable on the elected species, are clearly restricted to the non-elected species and should therefore be withdrawn as well.

2. As such, claims 17, 18, 33, 34 and 38-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12-12-2006 as noted above.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 10, 14, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/48033 to Tracey et al. taken in view of Costemalle et al. (US 5,333,662).

WO '033 is applied for the same reasons set forth in the last office action. As to blending with a second rubber including natural rubber, SBR, BR, EPDM, it is noted that WO '033 indicates at page 1 thereof (under "Field of Invention") that the invention therein broadly encompasses inner tubes made from blends with "elastomers" but the specifically claimed rubbers are not mentioned. It however is known in this art, for very

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similar polymers used in similar applications (i.e. inner liners for tires), to be suitable and effective to blend other rubbers therein including NR, SBR, BR, EPDM (note col. 6, lines 28-44 of Costemalle et al.), inclusion of such therefore being considered to have been obvious and leading to only the expected results.

Note again that these claims are considered to lack descriptive support in the parent applicant and therefore are not entitled to benefit of this filing date. WO '033 is therefore still available as prior art as it was published on July 5, 2001, this being more than one year prior to the August 6, 2003 filing date for this application.

5. Claims 1-3, 5, 6, 8-16, 20, 21, 23-32 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costemalle et al. (US 5,333,662) taken in view of Elspass et al. (US 5,807,629) and at least one of [Morrissey (US 2,698,041 - newly cited), Baldwin et al. (US 2,964,489 - newly cited) and the excerpted portion of the Polymeric Materials Encyclopedia (pp. 3484-3492; previously cited by applicant)].

These references (except the newly cited references) are applied herein for substantially the same reasons as set forth in the last office action. Morrissey (e.g. col. 1, lines 15+ and figures) and Baldwin et al. (esp. col. 10, lines 3+ and col. 13, line 10) have been applied as additional evidence that the ordinary artisan understands that the functional requirements for a tire inner liner and a tire inner tube are very similar, it being well known to employ essentially the same compounds for either for only the expected results. Note further again that Elspass provides further evidence that the ordinary artisan, in addition to being considered to understand the similar functional requirements of inner tubes and innerliners and the common nature of employing the

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same/substantially similar compounds for both, understands that similar compounds to those claimed have known use as both innerliners and inner tubes. To form an inner tube from the advantageous innerliner compositions of Costemalle would therefore have been obvious for the expected benefits of heat aging resistance, etc. Further, note again also the excerpted Polymeric Materials Encyclopedia, like Costemalle, indicates that EXXPRO™ elastomer have advantages for tire innerliners – additionally, page 3491 of this excerpt also suggests that “tire bladders” are increasingly adopting the EXXPRO™ elastomers for the *expected improved flex and heat aging properties*, it being further emphasized that Elspass, Morrissey and Baldwin et al. are considered to amply demonstrate that the ordinary artisan would have appreciated and expected similar compounding and functional requirements for bladders and inner tubes as well as innerliners. Thus again, it is submitted that the expected advantages accompanying such materials would have strongly motivated the artisan to adopt such for inner tubes as well as innerliners, it being considered to have reasonably been expected to have been understood by the ordinary artisan that both inner tubes and innerliners would benefit from improved flex and heat aging.

As to blending with a second rubber including the rubber of the dependent claims, note again that Costemalle et al. '662 suggests it to be suitable and effective to blend other rubbers therein including NR, SBR, BR, EPDM (note col. 6, lines 28-44 of Costemalle et al.), inclusion of such therefore being considered to have been obvious for an inner tube as well for only the expected results

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6. Applicant's arguments filed 8-29-2006 have been fully considered but they are not persuasive.

First, with respect to claim 18, as noted in the previous advisory action, it is agreed that this claim was entitled to the priority claim (the examiner inadvertently using the patent (6,626,219) that issued from the parent as representative of the disclosure of the parent and thus not noticing that although not present in this patent, it was present in the original parent application). With respect to the rejection of claims 10, 14, 31 and 32 over WO '033, note the statement of rejection where these claims as amended were substantive addressed. It should be noted however that applicant's discussion of having priority to WO '033 "and is only required to swear behind WO ' 033 for what it teaches. See MPEP 715.02" is incorrect. First, technically it should be stressed that priority is to the parent application 09/736,524 and the prior provisional application, not WO '033. Secondly, if there is no descriptive support for any given current claim in the parent application 09/736,524, then that claim is not entitled to priority and thus the filing date for such a claim would be the August 6, 2003 filing date for this application. In such case, WO '033 is available as prior art against that claim under 35 USC 102 (b) and therefore cannot be sworn behind - e.g. see MPEP 2133.01. In this instance, as support is lacking in the parent application for claims 10, 14, 31 and 32, WO '033 is properly available as prior art. As to the arguments that claim 31 is supported, the disclosure of EPDM in the blends at the noted parts of WO '033 (page 2, lines 3-7 and compound 9 in the examples, WO '033 taken as equivalent to the parent priority

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application) is describing the prior art blends with butyl, *not* the inventive compositions as claimed.

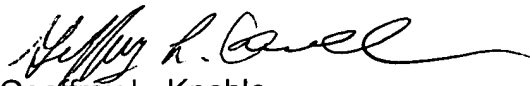
The arguments with respect to the prior art rejection based on Costemalle '662 have also been carefully considered but are unpersuasive. In particular, applicant stresses that there is no reasonable expectation of success of using an innerliner composition for inner tubes, especially in view of paragraph [0028] as well as paragraph [0003] in the specification, it being urged that innerliner compositions would desirably stick to the tire such being undesirable for tubes. It should however be noted that paragraph [0028] is describing problems if the bromination levels exceed the noted range of 0.1 to 3.0 mol percent - levels consistent with the desirable range are however suggested by Costemalle '662 (e.g. col. 9, lines 15-21) and thus following the teachings of this reference would not seem to necessarily raise the noted issues. Further, the discussion in paragraph [0003] is describing the problems with heat aging of typical butyl compounds - this however is precisely why the prior art suggest the inclusion of BIMS/EXXPRO - to provide expected improvement in heat aging, this therefore strongly motivating the artisan to use such, particularly as they are apparently aware of the heat aging problems present for inner tubes. Note also the newly cited secondary references further evidence that the ordinary artisan understands that the functional requirements for a tire inner liner and a tire inner tube (as well as bladders) are very similar, it being well known to employ essentially the same compounds for either for only the expected results - see also the statement of rejection above.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
March 3, 2007